

Claims

- [c1] 1. A method of treatment for common neurological disorders of the central and peripheral nervous systems wherein the neuron damage associated with the porphyrin precursors, delta-aminolevulinic acid and/or porphobilinogen, is a contributing factor, comprising the use of a uroporphyrin isomer as a neuroprotector to halt or mitigate the neuron damage.
- [c2] 2. The method of claim 1 wherein the neurological disorder is selected from the group of disorders: amyotrophic lateral sclerosis, stroke, encephalitis, meningitis, hereditary biochemical multiple sclerosis, acute immunodeficiency syndrome related neuropathy, diabetic neuropathy, Guillaine-Barre syndrome. [Claim Reference]
- [c3] 3. The method of claim 2 (amyotrophic lateral sclerosis) further comprising the use of uroporphyrin I delivered to the central nervous system using any of several methods that penetrate or bypass the blood-brain barrier. [Claim Reference]
- [c4] 4. The method of claim 3 further comprising the use of intrathecal delivery, intravenous injection, infusion, in-

gestion, olfactory (nasal) delivery, delivery by shunt or stent directly into the brain, or BBB weakening drugs or other methods meant to penetrate or bypass the blood-brain barrier to improve uroporphyrin I entry into or distribution throughout the central nervous system. [Claim Reference]

[c5] 5. The method of claim 1 wherein there is a neurological disorder of the central nervous system (stroke, encephalitis, meningitis). [Claim Reference]

[c6] 6. The method of claim 5 further comprising the use of uroporphyrin I delivered to the central nervous system using any of several methods. [Claim Reference]

[c7] 7. The method of claim 6 further comprising the use of intrathecal delivery, intravenous injection, infusion, ingestion, olfactory (nasal) delivery, delivery by shunt or stent directly into the brain, or BBB weakening drugs or other methods meant to penetrate or bypass the blood-brain barrier to improve uroporphyrin I entry into or distribution throughout the central nervous system. [Claim Reference]

[c8] 8. The method of claim 1 wherein the neurological disorder is hereditary biochemical multiple sclerosis [Claim Reference].

- [c9] 9. The method of claim 8 further comprising the use of uroporphyrin I delivered to the central nervous system during acute attacks using any of several methods. [Claim Reference]
- [c10] 10. The method of claim 9 further comprising the use of intrathecal delivery, intravenous injection, infusion, ingestion, olfactory (nasal) delivery, delivery by shunt or stent directly into the brain, or BBB weakening drugs or other methods meant to penetrate or bypass the blood-brain barrier to improve uroporphyrin I entry into or distribution throughout the central nervous system. [Claim Reference]
- [c11] 11. The method of claim 1 wherein the neurological disorder is a peripheral nervous system disorder (acute immunodeficiency syndrome related neuropathy, diabetic neuropathy, Guillaine-Barre syndrome). [Claim Reference]
- [c12] 12. The method of claim 11 further comprising the delivery of higher than normal amounts of uroporphyrin III to the bloodstream. [Claim Reference]
- [c13] 13. The method of claim 12 further comprising the use of intravenous injection, infusion, osmotic absorption or ingestion to deliver the uroporphyrin III to the blood-

stream. [Claim Reference]

[c14] 14. The method according to claim 1 wherein aminolevulinic acid dehydratase and/or porphobilinogen dehydratase are increased in serum or the central nervous system for the purpose of synthesizing uroporphyrin I anywhere within the body. [Claim Reference]

[c15] 15. The method of claim 1 wherein uroporphyrin I can be effectively substituted for or combined with uroporphyrin III though uroporphyrin III cannot be substituted for uroporphyrin I. [Claim Reference]

[c16] 16. The method of claim 1 wherein the treatment applies to, but is not limited to, the above listed neurological disorders. [Claim Reference]